



Draft Agenda

NASA Sounder Science Team Meeting

May 4-7, 2009, Caltech
a.m. light refreshments: 7:30 - 8:00
mid-afternoon light refreshments



Mon. May 4, 2009

NASA Sounder Science Team Coordination Meeting

Session 1: AIRS V6 Development Status (Friedman)

| | | | |
|----------------|------|--|---------|
| Tom Pagano | JPL | Welcome and Introduction | 8:00 AM |
| Steve Friedman | JPL | AIRS V6 Development Status | 8:20 AM |
| Bill Irion | JPL | Version 6 Test Plans and Procedures | 8:40 AM |
| Evan Manning | JPL | AIRS Level 2 Start-Up States | 9:00 AM |
| Joel Susskind | GSFC | Status and Plans for Version 6 | 9:20 AM |
| Larrabee Strow | UMBC | AIRS Retrievals of Dust-Contaminated Cloud-Cleared Radiances | 9:40 AM |

BREAK

10:00 AM

Session 2: Sounder Calibration (Elliott)

| | | | |
|----------------|------|--|----------|
| Denis Elliott | JPL | Instrument Status; Session Outline; Frequency Cal Process Overview | 10:20 AM |
| Evan Manning | JPL | V6 AIRS Spectral Calibration | 10:40 AM |
| Larrabee Strow | UMBC | Frequency Calibration of AIRS for V6 | 11:00 AM |
| Larrabee Strow | UMBC | Intercomparisons between AIRS and IASI Radiances | 11:20 AM |
| Hartmut Aumann | JPL | Lessons from 2 years of AIRS and IASI Data | 11:40 AM |

LUNCH

Noon - 1:30

| | | | |
|----------------|-----|--|---------|
| Margie Weiller | ATK | AIRS Level 1B Radiometric Calibration Coefficients | 1:30 PM |
| Margie Weiller | ATK | AIRS Detector A/B Weights - Update | 1:50 PM |

Session 3: Future Missions: NPP and MTOP A (Friedman)

| | | | |
|------------------------------|-------------------|---|---------|
| William Blackwell | MIT | CrIMSS Error Modeling with ATMS Proxy Data | 2:10 PM |
| Denise Hagan | NGST | Status of CrIS Pre-Launch Calibration Activities | 2:30 PM |
| Hank Revercomb | Univ of Wisconsin | Expected Calibration Performance of the NPP Cross-track Infrared Sounder (CrIS) | 2:50 PM |
| Tom Pagano | JPL | Impact of Level 1 Radiometric Stability on Level 2 Products and Expectations for CrIS | 3:30 PM |
| Steve Friedman/Ruth Monarrez | JPL | Sounder PEATE Development Status | 3:50 PM |
| Evan Fishbein | JPL | Sounder PEATE Data Products Supporting CrIMSS Product Assessment | 4:10 PM |
| Sung-Yung Lee | JPL | CrIMSS EDR at Sounder Peate | 4:30 PM |
| Open Discussion | | | 4:50 PM |

ADJOURN

5:30 PM



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NASA Sounder Science Team Meeting

Tues. May 5, 2009

Session 4: Project Overviews (Pagano)

| | | | |
|--------------|---------|-------------------------------|---------|
| Mous Chahine | JPL | Welcome | 8:00 AM |
| Ramesh Kakar | NASA HQ | NASA Headquarters Perspective | 8:20 AM |
| Tom Pagano | JPL | AIRS Project Status | 8:40 AM |

Session 5: Interdisciplinary Science (Pagano)

| | | | |
|---------------------------------|--------------------|---|-----------------|
| Joel Susskind | GSFC | Validation of Anomalies and Trends of AIRS Version 5 OLR | 9:00 AM |
| Oreste Reale | GSFC | AIRS Impact on Atlantic Tropical Cyclogenetic Processes in the GOES-5 Validation Overview | 9:25 AM |
| Joan Alexander and A. Grimsdell | CORA | Direct Validation of Modeled Gravity Waves Generated by Convection with AIRS | 9:50 AM |
| BREAK | | | 10:15 AM |
| Eric Wilcox | GSFC | Investigations of Smoke and Clouds using AIRS and A-Train | 10:40 AM |
| Ramesh Singh | Chapman University | Validation of AIRS Products over India and Comparisons with Other Sensors | 11:05 AM |

Session 6: Composition (Irion)

| | | | |
|------------------|-------------------------------------|--|--------------------|
| Edward Olsen | JPL | Validation of Six Years of Mid-Tropospheric CO ₂ Data from AIRS | 11:30 AM |
| LUNCH | | | Noon - 1:30 |
| Yuk Yung | Caltech | Global Distribution of CO ₂ in Mid-Troposphere from AIRS Measurements Reveal Cross Equator Exchange | 1:30 PM |
| Xun Jiang | University of Houston | Seasonal and Interannual Variability of AIRS CO ₂ | 1:55 PM |
| Junjie Liu | University of California - Berkeley | AIRS CO ₂ Data Assimilation with Ensemble Kalman Filter | 2:20 PM |
| Larrabee Strow | UMBC | Global Lower Tropospheric CO ₂ Retrievals from AIRS | 2:40 PM |
| BREAK | | | 3:00 PM |
| Wallace McMillan | UMBC | AIRS CO Update V5, V5 and Global Trends | 3:30 PM |
| Juying Warner | UMBC | Tropospheric CO Differences between Two Minimization Methods and Validations with NASA Field Measurements | 4:00 PM |
| Jenny Fisher | Harvard | Constraints on the sources and transport of Arctic CO from AIRS, ARCTAS, and the GEOS-Chem model." | 4:20 PM |
| Jasna Pittman | NCAR | Evaluation of AIRS, IASI and OMI Ozone Using In Situ Measurements from the START08 Campaign | 4:40 PM |
| Open Discussion | | | 5:00 PM |
| ADJOURN | | | 5:30 PM |



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NASA Sounder Science Team Meeting

Wed. May 6, 2009

Session 7: V5 Validation Overview (Fetzer)

| | | | |
|----------------|-----------------------|--|----------------|
| Eric Fetzer | JPL | V5 Validation Overview | 8:00 AM |
| Bill Irion | JPL | Early Validation Results for AIRS Water Vapor and Temperature Using Averaging Kernels | 8:20 AM |
| Liming Li | University of Houston | The Recycling Rate of Moisture in the Atmosphere Based on AIRS Observations | 8:40 AM |
| Baijun Tian | UCLA | Intercomparison of UT/LS Temperature Profiles from AIRS, GPS, and ECMWF | 9:00 AM |
| Vivienne Payne | AER | Performance of the line by line radiative transfer model (BLRTM) for temperature and species retrievals: IASI case studies from JAIVEx | 9:20 AM |
| BREAK | | | 9:40 AM |
| Glynn Hulley | JPL | Validation and assessment of AIRS land surface emissivity products from V5 and V5.4 | 10:00 AM |
| Daniel Zhou | LaRC | Derive infrared surface emissivity from satellite hyperspectral sounders | 10:20 AM |

Session 8: Temperature and Water Vapor (Teixeira)

| | | | |
|------------------------|-----------|---|--------------------|
| Eric Fetzer/HengchunYe | JPL | Changes in atmospheric water vapor associated with air temperatures over northern Eurasia | 10:40 AM |
| Hui Su | JPL | Tropospheric Water Vapor Variability and Linkage to Large-Scale Circulation | 11:00 AM |
| Brian Kahn | JPL | Cloudy and Clear Sky Relative Humidity in the Upper Troposphere Observed by AIRS, CloudSat, and CALIPSO: Quantifying Inter-TBD | 11:20 AM |
| TBD | TBD | TBD | 11:40 AM |
| LUNCH | | | NOON - 1:30 |
| Brian Kahn | JPL | Cloudy and Clear Sky Relative Humidity in the Upper Troposphere Observed by AIRS, CloudSat, and CALIPSO: Quantifying Inter-Hemispheric Humidity Differences | 1:30 PM |
| Calvin Liang | JPL | A combined AIRS and MLS Perspective on Upper Tropospheric Water Vapor | 1:50 PM |
| Sean Casey | Texas A&M | Tropospheric Relative Humidity and Tropical Cumulus Congestus Clouds as Viewed in Collocated AIRS/CloudSat Data | 2:10 PM |

Session 9: Dust and Clouds (Kahn)

| | | | |
|----------------|--------------------|---|----------------|
| Van Dang | JPL | Comparison of AIRS and MODIS Level 2 Cloud Top Properties | 2:30 PM |
| BREAK | | | 2:50 PM |
| Li King-Fai | Caltech | A discriminant analysis of hyperspectral data in clear and cloudy atmospheres | 3:10 PM |
| Hartmut Aumann | JPL | Additional Talk - Clustering Clouds & Hurricanes | 3:30 PM |
| Ovidu Pancrati | Environment Canada | Cloud parameters validation using simulated AIRS radiances | 3:50 PM |

Session 10: Data System Status (Friedman)

| | | | |
|------------------------|------|--|----------------|
| Thomas Hearty | GSFC | Cloud parameters validation using simulated AIRS radiances | 4:10 PM |
| Sharon Ray/KevinHussey | JPL | AIRS EPO & Eyes on the Earth 3D Demo | 4:30 PM |
| Open Discussion | | | 5:00 PM |
| ADJOURN | | | 5:30 PM |